

CLAIMS

1. A data processing system comprising a portable terminal and a terminal mount wherein the mount includes a terminal interface and processor capability for processing data received from the terminal and the terminal includes a user interface, a mount interface and processor capability sufficient only to relay user input to the mount for processing and data from the mount to the user interface.
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2. A system as claimed in claim 1 further comprising a host processor, the mount including a host interface and processor capability for processing data from the host processor for relay to the terminal.
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3. A system as claimed in claim 2 in which the terminal mount includes cache means for caching applications downloaded from the host via the host interface.
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4. A system as claimed in claim 1 in which the mount/terminal interface comprises a wireless link.
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5. A system as claimed in claim 1 in which the mount includes terminal power supply recharging means.
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6. A system as claimed in claim 1 in which the mount further includes computer peripherals.
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7. A system as claimed in claim 6 in which the computer peripherals comprise one or more of the group of a display, printer, a disk drive, a modem.

8. A system as claimed in claim 1 in which the mount
is arranged to be provided on a vehicle.
- 5 9. A data processing system comprising a stand-alone
data terminal, docking means for docking the terminal
and a host network, the terminal including a user input
and docking means interface arranged to relay user
input to the mount and the mount including a terminal
interface and a host interface arranged to relay the
10 user input to the host, for processing.
- 15 10. A method of relaying data between a portable
terminal and a base station comprising the steps of
inputting data to the terminal, relaying the data to
the base station with minimal processing and processing
the data at the base station.
- 20 11. A method as claimed in claim 10 in which the
terminal and base station communicate via wireless
communication.
- 25 12. A method as claimed in claim 11 in which the
information input to the terminal comprises
inventorying information.
13. A method as claimed in claim 11 in which the
information input to the terminal comprises retail
related information.
- 30 14. A method as claimed in claim 11 in which the
information input to the terminal comprises stock
exchange related information.
15. A method as claimed in claim 10 further including

the step of physically connecting the terminal to the base station at intervals for data downloading and/or battery recharging.

- 5 16. A product information retrieval system comprising a portable terminal arranged to receive data from one or more data output points in a product access zone in which the terminal is arranged to display an image of a product to be accessed in response to data received
10 from the data output point.
- 15 17. A system as claimed in claim 16 in which the terminal receives data from the data output point by wireless communication.
- 20 18. A system as claimed in claim 16 in which the product image corresponds to a product in a vicinity of the terminal.
- 25 19. A system as claimed in claim 18 in which a plurality of data output points are provided and the product image is selected from products in the vicinity of the data output point from which the terminal is receiving data.
- 30 20. A system as claimed in claim 18 in which the terminal includes a positioning system and the product image corresponds to a product in the vicinity of the detected position of the terminal.
21. A system as claimed in claim 16 in which the terminal is arranged to display a map of the product access zone.

22. A system as claimed in claim 21 in which the terminal is further arranged to indicate the position of the terminal on the map.
- 5 23. A system as claimed in claim 16 in which the product access zone comprises a retail outlet.
- 10 24. A system as claimed in claim 23 in which the terminal is arranged to display an image of a product on offer.
- 15 25. A system as claimed in claim 23 in which a terminal user inputs identification information to the system.
- 20 26. A system as claimed in claim 25 in which the terminal is arranged to display an image of a product related to user preference derived from the user identification information.
- 25 27. A system as claimed in claim 16 in which the terminal further comprises one or more of the group of an optical reader or a data pen.
- 30 28. A system as claimed in claim 16 in which the terminal further includes an audio speaker.
29. A system as claimed in claim 28 in which the terminal further includes a voice synthesizer for relaying product or other information.
- 30 30. A system as claimed in claim 16 in which the terminal includes a range alarm arranged to activate if the terminal leaves the product access zone or a zone

defined related to the product access zone.

31.. A product information retrieval system as claimed
in claim 16 further comprising a terminal docking point
5 arranged to receive the terminal for battery charging
and/or data relay.

32. A system as claimed in claim 23 in which the
terminal is arranged to display an image of a product
10 to be relocated together with relocation information.

33. A system as claimed in claim 16 in which the
product access zone comprises a storage zone and a
15 terminal is arranged to display an image of a product
to be relocated together with relocation information.

34. A method of retrieving product information in
which a portable terminal is provided in a product
access zone and receives data from one or more data
20 output points, and in which the terminal displays an
image of a product to be accessed in response to data
received from a data output point.

35. A portable data terminal for operation in an
25 operation zone having one or more physical items
located at predetermined positions in the zone wherein
the data terminal comprises a communications receiver
and a display arranged to display icon's representative
of the physical item and/or its position in the
30 operation zone.

36. A data transfer apparatus comprising a portable
data terminal and a base arranged to receive the
terminal, the base and terminal including means for

mutual wireless communication, the terminal comprising data input and display means and minimum front end processing capability and the base comprising back end processing capability for processing data from the
5 terminal.

37. An apparatus as claimed in claim 36 in which the terminal further includes one of the group of a broadcast radio receiver and a television receiver.

10 38. An apparatus as claimed in claim 36 in which the terminal further includes an optical reader portion, the optical reader portion being detachably connected to the terminal.

15 39. An apparatus as claimed in claim 36 in which the terminal further includes a motion/orientation sensor, and means for controlling operation of the terminal dependent on the motion/orientation sensed.

20 40. A terminal mount for mounting a portable data terminal, the mount being adapted for wireless communication with the data terminal, wherein the mount is arranged to receive or derive display format information for a terminal to be mounted thereon and configure data to be displayed at the terminal according to the display format.

25 41. A mount as claimed in claim 40 in which the mount configures data for display according to one of a predetermined set of format options.

30 42. A mount as claimed in claim 40 arranged to adapt data for display based on the number of characters per

horizontal line in the data display format.

43. A mount as claimed in claim 40 arranged to scale
the display size of data to match the available display
format.
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44. A data communications system comprising a portable
data communication device and a device mount arranged
to releasably receive the device, in which the device
mount includes a user identification information input
10 and a device lock arranged to release the device on
input of approved user identification information.

45. A system as claimed in claim 44 in which the
15 portable data communication device comprises a cellular
telephone.

46. A system as claimed in claim 44 in which, upon
release of the device, a timer is started, and upon
20 reinsertion of the device the time stops to allow
billing to the identified user.

47. A system as claimed in claim 44 in which the mount
is configured to carry out a status test on a device
25 inserted therein.

48. A method of monitoring access to a portable data
communication device wherein the portable data
communication device is releasably received in a device
30 mount, a user inputs user identification information to
the mount, the mount releases the device if the
identification information is approved and,
simultaneously, commences the timer, the timer is
stopped when the terminal is reinserted on the mount

and the identified user is billed for the timed period between release and reinsertion of the device.

5 49. A method as claimed in claim 48 in which the device mount carries out a status check of the device when it is reinserted.

10 50. A data communication device including wireless communication means for communicating with one or more access points to a local computer network, the device further comprising cellular telephone means for conventional telephone communication when the device is out of range of the access points to local computer network.

15 51. A goods transport tracking system comprising a communication device for a transport vehicle arranged to log receipt and/or delivery of goods and including means for wireless communication with a communication network and means for creating a data file accessible via the communication network to provide receipt/delivery information.

25 52. A system as claimed in claim 51 in which the communication device comprises a communication base locatable on a vehicle and a portable data device arranged for wireless communication with the base and including means for logging receipt and delivery of goods.

30 53. A system as claimed in claim 51 in which the receipt/delivery information comprises one or more of goods received, goods delivered, goods attempted delivered.

54. A system as claimed in claim 51 in which the data file further provides current transport vehicle location information.

5 55. A system as claimed in claim 51 in which the data file creation means comprises a server arranged to create a network file.

10 56. A goods transport tracking network comprising a physical network of transfer points comprising transport vehicles and intermediate stations and a communications network, in which an interface to the communications network is provided at each transfer point and in which the passage of goods is logged at each transfer point allowing transport information to be accessed at the communications network.

15 57. A network as claimed in claim 56 in which a routing table is developed at the communication network 20 for goods to be tracked.

58. A network as claimed in claim 57 in which each interface comprises a base station and a portable data terminal in mutual wireless communication.

25 59. A rechargeable battery pack for an electrically powered device arranged to be received in a battery charger for recharging, in which the battery pack has predetermined recharging requirements and includes 30 recharging control circuitry for controlling the recharge operation to meet the predetermined requirements.

60. A rechargeable battery pack as claimed in claim 59

in which a recharging requirement comprises the charging rate.

61. A battery recharger for receiving and recharging a
5 rechargeable battery pack having predetermined
recharging requirements and responsive to recharging
control means on the battery pack to control recharge
operation to meet the predetermine recharging
requirements.

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62. A battery recharger as claimed in claim 61
comprising a plurality of battery pack receiving and
recharging points.

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63. A data device arranged to communication with a
communication network including an adapter module
interface and an adapter module in which the adapter
module carries network communication capability.

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64. A device as claimed in claim 63 in which the
adapter module comprises an adapter card.

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65. A device as claimed in claim 63 in which the
network communication capability includes at least one
protocol stack and at least one network file system
client.

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66. A device as claimed in claim 65 in which the
protocol stack and network file system client run on a
processor in the adapter module.

67. An adapter module for a data device communicating
with a communication network in which the adapter
module carries network communication capability for the

device.

- 68.: A portable data communication device comprising
data capture means, an adapter module interface and an
5 adapter module, wherein the adapter module includes an
internal server for creating an internet site and
communication means for communicating with an access
point to the Internet.
- 10 69. A terminal as claimed in claim 68 in which the
adapter module comprises an adapter card.
- 15 70. An adapter card for a portable communication
device, the adapter card comprising a device interface,
an internal server for creating a network file for data
captured by the device and a network interface.
- 20 71. A power pack for cooperation with a device to
power the device, the power pack comprising
rechargeable cells, charging circuitry and a connector
for connecting to a power supply to recharge the cells.
- 25 72. A power pack as claimed in claim 71 in which the
charging circuitry comprises one or more of the group
of: AC/DC convertor, charge electronics, gas gage.
73. A power pack as claimed in claim 71 in which the
rechargeable cells are replaceable.
- 30 74. An adapter for a battery charging system including
a battery pack and a recharger in which the adapter
includes a battery pack interface, a recharger
interface and charging control circuitry.